

## CLAIMS

I claim:

1. A method for inhibiting gastrointestinal absorption of phosphorous in a person, comprising:

orally ingesting a quantity of calcium glutarate sufficient to bind with phosphorous in the gastrointestinal tract.

2. The method according to claim 1 wherein the calcium glutarate is present in an amount sufficient to provide between about 400mg to about 1500mg of calcium as calcium glutarate.

3. The method according to claim 1 wherein the calcium glutarate is in tablet form.

4. The method according to claim 1 wherein the calcium glutarate is in gelatin capsule form.

5. The method according to claim 1 wherein the calcium glutarate is in effervescent form.

6. The method according to claim 1 wherein the calcium glutarate is in liquid form.

7. A method for inhibiting gastrointestinal absorption of phosphorous in an individual, comprising:

orally ingesting a quantity of calcium glutarate at a mealtime.

8. The method according to claim 7 wherein the quantity of calcium glutarate is present in an amount sufficient to produce between about 400mg to about 1500mg of calcium as calcium glutarate.

9. The method according to claim 7 wherein the quantity of calcium glutarate is in tablet form.

10. The method according to claim 7 wherein the quantity of calcium glutarate is in gelatin capsule form.

11. The method according to claim 7 wherein the calcium glutarate is in effervescent form.

12. The method according to claim 7 wherein the calcium glutarate is in liquid form.
13. A pharmaceutical therapeutic composition in oral dosage form for controlling phosphate retention in patients having need for reduced absorption of dietary phosphate, said composition comprising sufficient calcium glutarate to bind with phosphorus in the gastrointestinal tract, and a pharmaceutically acceptable excipient for said oral dosage form.
14. The therapeutic composition according to claim 13 wherein the quantity of calcium glutarate is present in an amount sufficient to produce between about 400mg to about 1500mg of calcium as calcium glutarate.
15. The therapeutic composition according to claim 13 wherein the quantity of calcium glutarate is in tablet form.
16. The therapeutic composition according to claim 13 wherein the quantity of calcium glutarate is in gelatin capsule form.
17. The therapeutic composition according to claim 13 wherein the calcium glutarate is in effervescent form.
18. The therapeutic composition according to claim 13 wherein the calcium glutarate is in liquid form.
19. An orally administerable pharmaceutical composition for use in the treatment of hyperphosphatemia and for preventing the formation of phosphate- and oxalate-containing kidney stones in humans which comprises as the principal active ingredient a therapeutically effective amount of calcium glutarate combined with a pharmaceutically acceptable carrier.
20. A pharmaceutical composition according to claim 19 particularly adapted for treating hyperphosphatemia and for preventing the formation of phosphate-containing kidney stones in

which the calcium glutarate is present in an amount of about 400mg to about 1500mg of calcium as calcium glutarate.

21. A method for treating hyperphosphatemia and for preventing the formation of phosphate- and oxalate-containing kidney stones in humans which comprises orally administering to a person in need thereof a pharmaceutical composition according to claim 19.

22. A method for treating hyperphosphatemia and for preventing the formation of phosphate- and oxalate-containing kidney stones in humans which comprises orally administering to a person in need thereof a pharmaceutical composition according to claim 20.

23. A method for treating hyperphosphatemia and for preventing the formation of phosphate-containing kidney stones in humans which comprises orally administering to a person in need thereof a pharmaceutical composition according to claim 19.

24. A method for treating hyperphosphatemia and for preventing the formation of phosphate-containing kidney stones in humans which comprises orally administering to a person in need thereof a pharmaceutical composition according to claim 20.

25. A pharmaceutical compound for treating hyperphosphatemia and for preventing the formation of phosphate-containing kidney stones in humans of the formula:  
pharmaceutical grade  $[\text{OOC-CH}_2\text{-CH}_2\text{-CH}_2\text{-COO}]\text{Ca}$  in an amount sufficient to inhibit gastrointestinal absorption of phosphorous in a person, and a pharmaceutically acceptable carrier.

26. A method of treating for treating hyperphosphatemia and for preventing the formation of phosphate-containing kidney stones in humans, which comprises administering to a mammal a phosphorous binding amount of the compound of claim 25.

27. A method of treating hyperphosphatemia, which comprises administering to a mammal a hyperphosphatemia treating amount of the compound of claim 25.

28. The therapeutic composition according to claim 25 wherein the quantity of calcium glutarate is present in an amount sufficient to produce between about 400mg to about 1500mg of calcium as calcium glutarate.

29. The therapeutic composition according to claim 25 wherein the quantity of calcium glutarate is in tablet form.

30. The therapeutic composition according to claim 25 wherein the quantity of calcium glutarate is in gelatin capsule form.

31. The therapeutic composition according to claim 25 wherein the calcium glutarate is in effervescent form.

32. The therapeutic composition according to claim 25 wherein the calcium glutarate is in liquid form.